

## CLAIMS

1. Apparatus for applying a plastic edge strip (28) on an  
5 edge of a plate-like workpiece (16), such like a wooden  
board, a chip or particle board, a board of wood-like  
particles or the like, comprising:
- extrusion means (18) for extruding a strand of plastic  
material (20) on an edge (14) of the workpiece (16);
  - 10 - forming means (24) for forming the extruded strand of  
plastic material (20) in a desired profile.
2. Apparatus according to claim 1, characterized in that  
the apparatus further comprises transporting means (36)  
for transporting the workpiece (16) past the extrusion  
means (18).
3. Apparatus according to claim 1, characterized in that it  
comprises a stationary support means (52) for supporting  
the workpiece (16); a clamping means (54) for clamping  
the workpiece (16) to the support means; and a movable  
member (58) on which the extrusion means (18) and the  
forming means (24.1, 24.2) are carried such that the  
extrusion means (18) and the forming means (24.1, 24.2)  
25 are transportable along the edge to which the strip is  
to be applied.
4. Apparatus according to claim 1, characterized in that  
the apparatus further comprises at least one pressure  
30 means (34) to urge the workpiece (16) against the  
forming means (24).
5. Apparatus according to claim 1, characterized in that  
the forming means comprises at least one rotatable  
35 roller (24) having a circumferential profile  
substantially corresponding with the desired profile of

the strand of plastic material (20) applied on the edge (14) of the workpiece (16).

6. Apparatus according to claim 1, characterized in that the forming means comprises several rotatable rollers (24) arranged successively, wherein the rollers (24) having different circumferential profiles such that the rollers (24) altogether deform the strand of plastic material (20) applied on the edge (14) of the workpiece (16) in the desired profile.
7. Apparatus according to claim 1, characterized in that the apparatus further comprises application means (42) for applying an adhesive to the edge (14) of the workpiece (16) to be covered by the strand of plastic material (20), wherein the application means (42) are arranged in front of the position at which the strand of plastic material (20) is applied on the edge (14) of the workpiece (16).
8. Apparatus according to claim 1, characterized in that the apparatus further comprises cooling means (46) for cooling the strand of plastic material (20) applied on the edge (14) of the workpiece (16).
9. Apparatus according to claim 1, characterized in that the apparatus further comprises supply means (50) for supplying a decorative layer (48) on the strand of plastic material (20) provided on the edge (16) of the workpiece (16).
10. Apparatus according to claim 6 and 7, characterized in that the cooling means (46) is arranged at a position in which the decorative layer (48) is already applied on the strand of plastic material (20).

11. Apparatus according to claim 1, characterized in that the transporting means comprises at least one pair of driven wheels (36) arranged such that the workpiece (16) is clamped between the wheels.

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12. Method for applying a plastic edge strip (28) on an edge of a plate-like workpiece (16), such like a wooden board, a chip or particle board, a board of wood-like particles or the like, comprising:

- 10     - extruding a strand of plastic material (20) on an edge (14) of the workpiece (16)
- forming the extruded strand of plastic material (20) in a desired profile.

15     13. Method according to claim 12, characterized in that during the method step of extruding the strand of plastic material (20) on the edge (14) of the workpiece (16), the workpiece (16) is transported past an extrusion means for extruding the strand of plastic material (20).

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14. Method according to claim 12, characterized in that during the method step of extruding the strand of plastic material (20) on the edge (14) of the workpiece (16), the workpiece (16) is stationary held and an extrusion means for extruding the strand of plastic material (20) is moved along the edge (14) of the workpiece (16).

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30     15. Method according to one of the claims 12 - 14, characterized in that the strand of plastic material (20) is formed after it has been applied on the edge (14) of the workpiece (16).

35     16. Method according to one of the claims 12 - 15, characterized in that the strand of plastic material (20) is formed by forming means comprising at least one

rotatable roller (24) having a circumferential profile substantially corresponding with the desired profile of the strand of plastic material (20) applied on the edge (14) of the workpiece (16).

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17. Method according to one of the claims 12 - 15, characterized in that the strand of plastic material (20) is formed by forming means comprising several rotatable rollers (24) arranged successively, the rollers (24) having different circumferential profiles such that the rollers (24) altogether form the strand of plastic material (20) applied on the edge (14) of the workpiece (16) in the desired profile.

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18. Method according to claim 12, characterized in that an adhesive is applied to the edge (14) of the workpiece (16) before the strand of plastic material (20) is applied on the edge (14) of the workpiece (16).

19. Method according to claim 12, characterized in that the strand of plastic material (20) applied on the edge (14) of the workpiece (16) and formed in the desired profile is cooled by cooling means (46).

20. Method according to claim 12, characterized in that a decorative layer (48) is applied on the strand of plastic material (20) already extruded on the edge (14) of the workpiece (16).

21. Method according to claim 20, characterized in that the decorative layer is a foil (48).

22. Plate-like workpiece, wherein on an edge (14) of the workpiece (16) a strand of plastic material (20) is extruded, formed in a desired profile, and hardened, the formed strand of plastic material (20) being fixedly joint with said edge (14).

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